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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/941,151
Filing Date: August 28, 2001
Appellant(s): CHAPOULAUD ET AL.

Thomas Humphrey
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed November 2, 2010 appealing from the Office action mailed March 1, 2010.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 120-132 are rejected

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the

subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

| | | |
|-----------|----------------|---------|
| 5,975,893 | Chishti et al. | 11-1999 |
| 6,575,751 | Lehmann et al. | 6-2003 |
| 6,217,334 | Hultgren | 4-2001 |
| 6,205,716 | Peltz | 3-2001 |

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 120-132 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chishti et al. (5,975,893) in view of Lehmann et al. (6,575,751).

Chishti et al. discloses a method of providing a custom orthodontic appliance for repositioning teeth of a patient comprising providing for display on a computer screen, with interaction by an operator (user), data of images of the teeth of the patient in

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suggested post-treatment tooth positions and orientations (final digital data set) based on three-dimensional information of the shapes of the teeth (column 5 line 37), receiving feedback information from a person (treating professional), other than the operator, and providing a custom orthodontic appliance configured to reposition teeth based on the suggested post treatment tooth positions and orientations. It is noted that the interactive step is written in the past tense, and interactivity can be interpreted as with the computer system. Furthermore, there is suggestion as to various times when "users" can provide feedback as in information to modify (change) or accept (not change) tooth positions and orientations in obtaining post-treatment tooth positions and orientations (columns 4-7, 9- 14). However, Lehmann et al. is used to teach a situation in which the person, treating professional, or orthodontic practitioner (dentist) does not have access to the computerized site and uses the services of another such as that of the operator, user, or laboratory, and interactivity is present in the method of providing a custom dental appliance. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the person who has interactively viewed a display of the images as understood as in Lehmann et al. in order to enable the person to save time and effort in communicating with the laboratory operator in view of Lehmann et al. As changes are incorporated, it is redisplayed.

Claims 120-132 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chishti et al. (5,975,893) in view of Hultgren 6,217,334 further in view of Peltz 6,205,716.

Chishti teaches a method of providing a custom orthodontic appliance for repositioning teeth of a patient comprising providing for display on a computer screen (col. 5, II. 49-51) with interaction by an operator (user), data of images of the teeth of the patient in suggested post-treatment tooth positions and orientations (final digital data set) based on three-dimensional information of the shapes of the teeth (col. 5 II. 49-64), receiving feedback information from a treating professional providing revised images of the teeth (col. 14, II. 24-34 and providing custom appliances based of the feedback (fig. 7, col. 14, II. 35-37). The feedback received from the treating professional, such as approval or suggestions would have been obvious information to provide during an orthodontic consultation. Chishti does not specifically state if the person who delivered the feedback is different from the operator.

Hultgren teaches digitizing tooth models, creating a positive image and producing them by remote transmission to a consulting dentist (col. 7, II. 40-56). The step of providing by remote transmission obviously teaches that the operator doing the scanning is a different person than the dentist, as such, it would have been obvious to one having ordinary skill in the art to modify the method taught by Chishti with the step of remotely transmitting the dental models taught by Hultgren in order to provide more accurate digital images at a remote lab for consultation. Chishti/Hultgren teaches the invention as substantially claimed and discussed above, however, does not specifically teach the interaction with the operator and receiving the feedback is interactive.

Peltz teaches an interaction communication between a user and a medical professional (abstract, col. 1, II. 34-43, 47-50, col. 2, II. 5-10, col. 7, II. 52-60). It would

have been obvious to one having ordinary skill in the art at the time of the invention to modify the method taught by Chishti/Hultgren with the step of interaction between two people taught by Peltz to receive immediate feedback from a specialist.

(10) Response to Argument

Appellant argues that the prior art of Chishti does not teach providing feedback after the development of an image from a treating professional or other third party, however, in col. 14, ll. 16-20, Chishti teaches providing annotation to the datasets, which is after the image is developed, by treating professional, therefore, Chishti teaches providing feedback, however, it is noted that the secondary reference of Lehmann is used to teach the specific limitation of two users as discussed in detail below. It is further noted that the appellant argues at Chishti teaches a prescription written by the treating professional and then a computer operator implementing the prescription, however, Chishti teaches several method of determining the final tooth positions, such as having a user (which is considered a treating professional since they are the professional treating the patient) repositioning the teeth in an aesthetically and/or therapeutically desired manner based on observation of the image alone (col. 5, ll. 49-67). Chishti further teaches providing the data sets to a device to be fabricated and then providing the devices to the treating professional (col. 14, ll. 35-67, col. 15, l. 1). In response to the appellants arguments directed towards the specific limitations of two different users, it is noted that the prior art of Lehmann is used to teach those limitations.

Appellant argues that Lehmann would not modify the process of Chishti since Chishti teaches an orthodontic practitioner writes a prescription which is implemented via the computer by another person, however, as discussed above in detail, Chishti, teaches several different methods of obtaining the final positions of the teeth including the treating professional individually moving the teeth. Lehmann teaches a method of a treating professional designing a final treatment plan and transmitting that plan to a laboratory to be made just as discussed above with respect to Chishti. Lehmann further specifically teaches receiving feedback, in the form of modifications, to the treatment plan from someone other than the original treating professional (see abstract). Therefore it is noted that Lehmann would lead to a modification in the process taught by Chishti in that once the data is sent to the laboratory to be fabricated, it would further be modified by a user if needed as taught by Lehmann. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the person who has interactively viewed a display of the images as understood as in Lehmann et al. in order to enable the person to save time and effort in communicating with the laboratory operator in view of Lehmann.

Appellant further argues that Lehmann does not have an effective filing date earlier than November 1998; however, as discussed in detail in previous office actions, the declarations submitted are not sufficient to establish conception of the invention prior to the effective date of the Lehmann reference. Appellant argues that the declarations establish conception of the invention prior to the effective date of the Lehmann reference by the statements of Mr. Jordan witnessing as user "interactively

operated the computer and demonstrated to me the software for designing a custom orthodontic appliance for repositioning the teeth of a patient...as images including those corresponding to the original slides were displayed on the computer display.” and further witnessed "the interactive entry of feedback information by selecting, with a mouse, one of the twenty eight teeth of the patient by way of the controls". However, the evidence submitted with respect to Mr. Jordan's declaration, specifically the figures of the current application, is not sufficient in supporting the claimed limitations including providing feedback on the suggested post treatment tooth positions and orientations provided to a user as required and each of the independent claims and more specifically including the person who has interactively viewed the display and provided feedback is from a person other than the operator as claimed in claims 120 and 131. The second declaration by Mr. Chapoulaud has been argued by the appellant to support the predating of the Lehmann patent as evidenced by exhibits U and V. Appellant points to exhibits V and U to show the limitation of the feedback being provided on the images of the teeth, however, there is no evidence to show that the two images are related such that one image is the original image which is the image of the teeth in the post treatment positions and the second image has been interactively viewed and provided with feedback. Specifically, there is no evidence to show interactive feedback as required by each of the independent claims. It is noted that some of the images provided no indication of any feedback that has been provided and that some of the images has been marked up by hand to possibly show feedback, however, those marks or feedback do not show evidence of interactively viewing the image and providing feedback since

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those mark or feedback could have been provided to the images after the image was printed. It is further noted that there is no evidence suggesting that one of the images was provided to an operator and then interacted with and provided with feedback from another person other than the operator as required by claims 120 and 131. Specifically there is no evidence showing the interaction of the image between two different people. The evidence submitted to show this limitation is not sufficient such that the images provided do not show any relation and more specifically the interaction between two different users.

Appellant argues with respect to the secondary rejection that Hultgren would not inspire a change to the process taught by Chishti. However as discussed above with respect to the first rejection, Chishti teaches the method of designing a treatment plan, being an arrangement of teeth, and sending the information to a laboratory to manufacture the appliances. Hultgren teaches the method comprising the step of transmitting the data, the teeth arrangement, to a consulting dentist or a laboratory (see abstract). Therefore, it would have been obvious to one having ordinary skill in the art to transmit the treatment plan taught by Chishti to another user to get a second opinion of a consulting dentist. Appellant further argues that the prior art of Peltz does not teach anything specific to orthodontia or dental practice, however, as discussed in col. 15, ll. 64-67 and in claim 5, Peltz discusses the device used in dental practice. Appellant further argues the Peltz would not change the process of Chishti in which the practitioner writes a prescription before creating a final data set, however as discussed above in detail, the final data set is obtained in many other ways other than just writing

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a prescription. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to modify Chishti/Hultgren with the interaction taught by Peltz in order to receive immediate feedback from a specialist so as to develop a better treatment plan for the patient.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Heidi M Eide/

Examiner, Art Unit 3732

Conferees:

/Cris L. Rodriguez/
Supervisory Patent Examiner, Art Unit 3732

/Eric Nicholson/
RQAS -3700